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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/390,051      | 09/03/1999  | GEOGGREY S.M. HEDRICK | 3190-31             | 6250             |

7590 03/27/2002

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NEW YORK, NY 10176

EXAMINER

NGUYEN, FRANCIS N

ART UNIT PAPER NUMBER

2674

DATE MAILED: 03/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

109

**Office Action Summary**

Application No.

09/390,051

Applicant(s)

HEDRICK, GEOGGREY S.M.

Examiner

FRANCIS N NGUYEN

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 19 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-10 and 13-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on 11/19/01, faxed on 1/10/2002 is entered.
2. The indicated allowability of claims 1-10, 11-16 is withdrawn in view of the newly discovered reference(s) to Paper # 4, mailed 6/19/2001. Rejections based on the newly cited reference(s) follow.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffman et al.  
( U.S. Patent 5,453,939 ).

As to **claim 19**, Hoffman et al . discloses a color flat panel display for displaying simulated instruments and associated parameters and indicia for indicating integrity of display data ,(note that Hoffman et al. does teach a monitoring system applied to a vehicle, also see Abstract, first sentence; this should read on the claimed aircraft monitoring system and related flight instruments).

comprising:

a display screen on which at least one of the simulated aircraft instruments and said aircraft parameters are displayed in a first color ( instrument 10 comprising indicator lights and electronic gauges, column 4, lines 56-61 ) and said indicia are normally displayed in a single ,

Art Unit: 2674

predetermined, unchanging second color different from said first color ( column 7, lines 23-30) such that any color change in said indicia from said second color as a result of a change in indicia data fed to the display screen visually indicates reduced operating integrity of the display data and thereby visually alerts the crew to a possible problem with the displayed aircraft system parameters ( column 7, lines 45-67, also column 8, lines 43-58, column 11, lines 1-7, figures 8e and 9b).

As to **claims 20-21**, note the same citation for claim 19. Hoffman et al. further discloses said indicia defining a border of at least one of the simulated aircraft instruments displayed on said flat panel display ( **outline segments**, column 8, lines 48-52 ), discloses said indicia defining a pointer of at least one of the simulated aircraft instruments displayed on said flat panel display ( **one of symbols 26 is illuminated**, column 8, lines 63-67).

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al.

7. As to **claim 1**, Hoffman et al. discloses a flat panel display system for displaying data relating to system parameters from corresponding instruments to a vehicle, comprising

Art Unit: 2674

a flat display for visually display the vehicle system parameters , and for displaying indicia that said data is being received related to vehicle system parameters from corresponding instruments ( instrument 10 comprising indicator lights and electronic gauges, column 4, lines 56-61 ) ;

a first central processor for receiving said data from the vehicle instruments ( electronic control a shown in figure 3 )

a first graphics generator operatively coupled to the first central processor for generating a first set of color data ( figures 5 and 6 provide display of service mode and status mode, column 8, lines 59-64, column 9, lines 5-12, column 13, lines 40-46 ),

wherein during abnormal condition, the indicia on the flat panel display change colors ( column 7, lines 45-67, also column 8, lines 43-58, column 11, lines 1-7, figures 8e and 9b).

Note that Hoffman et al discloses vehicle instrument but fails to disclose expressly aircraft instruments; however, the examiner notes that the method of display is exactly the same equivalent for a vehicle such as an aircraft. Note also that Hoffman et al., teach a monitoring system with several sets of color data ( column 5, lines 29-36 ), different data processing stages ( electronic control, column 5, lines 51-65, this corresponds to the claimed second processor; therefore, more than one graphic generator per color is inherent. **It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the mechanism of display in a vehicle taught by Hoffman et al. to the aircraft system application, since both applications provide a visual alert to an operator/user, as to data validity/hardware health status to obtain the apparatus /associated method Hoffman et al. modified, because**

Art Unit: 2674

it would provide real-time health status of critical data an operator is monitoring; thus system reliability is obtained.

8. As to claims 2-12, note the same citations for claim 1.

9. As to claim 13, Hoffman et al. fails to teach a third processor for receiving data and for interrogating on a statistical basis to build a database. Note however that a flight recorder typically provides critical data for maintenance and diagnostic purpose. **It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the system and associated method taught by Hoffman et al. modified , then provide a flight recorder for buiding a data base for maintenance and diagnostic purpose, because it would result in continuous improvement of system reliability.**

10. As to claims 14-18, note the same citations for claim 13.

#### *Response to Arguments*

11. The arguments filed on 11/19/2001 have been considered but are considered moot due to newly presented art cited above.

#### *Conclusion*

12. The prior art made of record but not relied upon is considered pertinent to Applicant's Disclosure.

US Patent 5,446,659 Yamawaki

Reference Yamawaki is cited as it discloses the well-known use of flight recorder for maintenance/diagnostic purpose.

Art Unit: 2674

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached at 703 305-4579.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

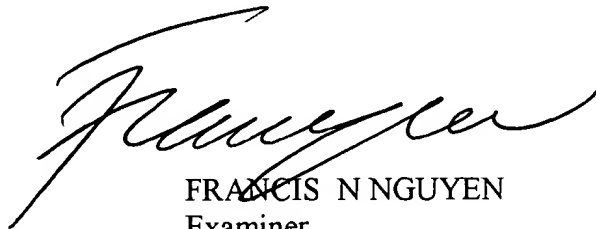
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 ( for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor ( Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service whose telephone number is (703)306-0377.



FRANCIS N NGUYEN  
Examiner  
Art Unit 2674

FN  
March 18, 2002